



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| | | | | |
|--|-------------|----------------------|------------------------------|------------------|
| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
| 09/870,716 | 05/30/2001 | Hiroshi Urabe | 71369-55968 | 8909 |
| 21874 7590 07/10/2006 EDWARDS & ANGELL, LLP P.O. BOX 55874 BOSTON, MA 02205 | | | EXAMINER NUTTER, NATHAN M | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 1711 | |
| DATE MAILED: 07/10/2006 | | | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 09/870,716 | URABE ET AL. | |
| | Examiner | Art Unit | |
| | Nathan M. Nutter | 1711 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 May 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 19 May 2006 has been entered.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-18 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The concept "to prevent bleed-out of the phasphazene compound" is not shown at page 14 (lines 10-20) or at page 15 (lines 18-22). The concept of page 14 is that "it is possible to enhance compatibility between the polyamide resin (A) and the phosphazene compound (C) and prevent the occurrence of sticky surfaces of pellets or molded products due to bleed-out of the phosphazene compound (C) or the occurrence of mold deposits." Nothing in that language asserts the

Art Unit: 1711

prevention of bleed-out of the phosphazene compound, as now claimed. At page 15 (lines 18-22), nothing relates to this concept, but rather to the content of the phosphazene compound, which is already a recitation of claim 1.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-15, 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakacho et al (EP 0 945 478) in view of Ida et al (US 6337031) or An et al (US 5028347).

The reference to Nakacho et al (EP 0 945 478) discloses the manufacture of a resin composition that may comprise a flame retardant, which may be a phosphazene compound, a thermoplastic resin, including polyamides and a modified polyphenylene ether (with or without a polystyrene resin) to produce a molded article. The employment of a polyamide, modified polyphenylene ether, styrene resin and modified styrene resins in combination is shown at page 10 paragraphs [0075] and [0076]. The reference teaches the inclusion of a phosphazene compound at page 3 (line 12) to page 6 (line 32), essentially identical to that instantly claimed. At page 4, paragraph 26, the reference teaches the compositional limitations to comprise (a) 100 parts by wt of resin,

Art Unit: 1711

(b) 0.1 to 100 parts by wt of a flame retardant, and (c) 0.1 to 50 parts by wt of organic phosphorus compound. The reference teaches the inclusion of cyclic phenoxy phosphazene at page 33, claim 1. The inclusion of inorganic fillers is shown at page 10, line 39 to page 11, line 18, including glass fibers.

The reference to Nakacho et al does not mention a magnetic powder (of instant claims 10-12).

The patent to Ida et al (US 6,337,031) discloses a flame-retardant resin magnet material comprising a magnetic powder based on ferrite at column 2 (line 65) to column 3 (line 31) which may be employed with a polyamide resin. Note the Examples for this teaching, as well.

The reference to An et al (US 5,028,347) teaches the employment of a flame-retardant magnetic composite resin composition that may comprise a magnetic powder at column 9 (line 42) to column 10 (line 4). An et al show surface treatment of the magnetic powder as recited in claim 15 at column 3 (lines 28-45). The resin may be a polyamide, as taught at column 2 (lines 29 et seq.).

Since each of the references teach the use of a polyamide, adding what would be conventional additives thereto, it would therefore have been obvious to add to the composition of Nakacho et al, the magnetic powder as taught by Ida et al or An et al with the expectation of obtaining a molded article such as a magnet, having flame retardant properties as well as magnetic properties. Furthermore, An et al show at column 3 (lines 28-36), the surface treatment of the glass fibers. An artisan of ordinary skill in the art would know to include surface treated glass fibers in the flame retardant

Art Unit: 1711

composition of Nakacho in order to improve dispersibility and thereby enhance mechanical strength and flowability.

Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nakacho et al (EP 0 945 478) in view of Ida et al (US 6,337,031) or An et al (US 5,028,347) as applied to claims 1-15 above, and further in view of White et al (US 4,806,602).

The reference to White et al (US 4,806,602) describes the anhydride capping polyphenylene ether with carboxylic acid, which is the thrust of the reference. It would have been obvious to modify polyphenylene ether resin used in the flame retardant composition of Nakacho since such a modified resin is less susceptible to oxidative degradation. Such degradation leads to a composition becoming dark in color and brittle.

Response to Arguments

Applicant's arguments filed 19 May 2006 have been fully considered but they are not persuasive.

Applicants assert that the reference to Nakacho et al "discloses that polyamide can be used as a resin in combination with many other resins; however, there is no teaching or suggestion of the presently-claimed combinations of polyamide resin, anti-bleedout resin or phosphazene compatibility enhancing resin, and flame retardant, wherein the phosphazene compatibility enhancing resin or anti-bleed-out resin (B) is

Art Unit: 1711

present in an amount sufficient to prevent bleed-out of the phosphazene compound from the resin composition.” Applicants’ claim 1 requires (A) a polyamide resin, (B) a polyphenylene ether-based resin, or a mixture thereof with a polystyrene based resin, and (C) a phosphazene compound. Nakacho et al show the polyamide, the polyphenylene ether-based resin and a phosphazene compound, as pointed out above. Applicants’ contention that the reference fails to “acknowledge that bleed-out of a phosphazene flame retardant from a polyamide resin can be a problem, so it is not surprising that Nakacho does not teach or suggest a solution to this problem,” has not been substantiated in fact and is deemed irrelevant since the reference shows the inclusion of the constituents, as claimed. A patentee does not have to recognize each and every miniscule concept or characteristic to obviate or anticipate claimed subject matter. Further, applicants attempt to proffer patentability over Nakacho et al by asserting that they include other constituents, therefore outside the scope of the instant claims. It is pointed out that the instant claims recite “comprising,” which is not seen to exclude other constituents, even in large amounts. Applicants further attempt to negate the teachings of Nakacho et al by using isolated examples that may not be within the scope of the claimed subject matter. It is pointed out to applicants that a reference is taken for the entirety of its teachings and not for any isolated passages.

Again, Applicants are attempting to apply a standard of 35 USC 102 for a rejection that has been made under 35 USC 103. The reference clearly shows a modified PPE resin at paragraph [0076] added in a mixture with a polyamide. That paragraph shows only a choice of five resins, not “a lengthy list.” Further, the

Art Unit: 1711

compositional limitations at paragraph [0082] for the flame retardant embraces that of the instant claims. The rejections were made under 35 USC 103 and not 35 USC 102. The amounts of the resins employed would certainly be within the skill of an artisan depending upon factors that may include cost and availability, as well as final product characteristics. Applicants have failed to show any unexpected results as drawn to this feature. Applicants are reminded that a reference is taken for its entirety and not for any isolated teachings that may be extracted, e.g. "working examples." The disclosure of the reference does not need to present a working example that includes the resins claimed since those resins are broadly disclosed in combination.

With regard to the references to Ida et al and An et al, these references are cited to show the conventionality of the use of magnetic powders that may be used with polyamides. It is not necessary for the patent to Ida et al to teach the identical phosphazene compounds employed herein, that is taught by Nakacho et al. it is sufficient that Ida et al show the use of the magnetic powder with a flame retardant. The same is true for An et al. Applicants are requiring the references to meet the standards of 35 USC 102, while the rejection has been made under 35 USC 103. If the secondary references included all of the constituents, as applicants seem to think they must for a rejection under 35 USC 103, there would have been rejections madder under 35 USC 102 over each of the references. Applicants insist on pressing a higher standard for patentees than they require for themselves.

With regard to the rejection of claim under 35 U.S.C. 103(a) as being unpatentable over Nakacho et al (EP 0 945 478) in view of Ida et al (US 6,337,031) or

Art Unit: 1711

An et al (US 5,028,347) as applied to claims 1-15 above, and further in view of White et al (US 4,806,602), applicants require the same standards of 35 USC 102 for their response. The rejection was made under 35 USC 103, not under 35 USC 102. The reference to White et al is relied upon solely for the reasons set out above in the rejection.

Nothing unexpected or surprising has been shown on the record regarding any of the references or their teachings. The composition is deemed to be old in the art as shown by the references, as applied above.

. Nothing unexpected has been shown on the record with regard to the constituents or their respective amounts. The constituents are all conventional used in a conventional manner. As to these rejections, applicants attempt to establish reasoning based upon 35 USC 102, as opposed to 35 USC 103, but have not clearly shown why such standard is applicable. With regard to the Declaration of Suzuki, there is no comparison made with the teachings of the references as employed in the rejection of the claims. The Declaration is an attempt to show characteristics of the invention without making any side-to-side comparison with that already known in the art. Further, the comparison is made only in reference to what is claimed with what is claimed less the polyphenylene ether, which is not relevant to the rejection made. One of ordinary skill in the art would have a great expectation of success using the resins as taught by Nakacho et al.

All claims are drawn to the same invention claimed in the application prior to the entry of the submission under 37 CFR 1.114 and could have been finally rejected on the

Art Unit: 1711

grounds and art of record in the next Office action if they had been entered in the application prior to entry under 37 CFR 1.114. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action after the filing of a request for continued examination and the submission under 37 CFR 1.114. See MPEP § 706.07(b).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

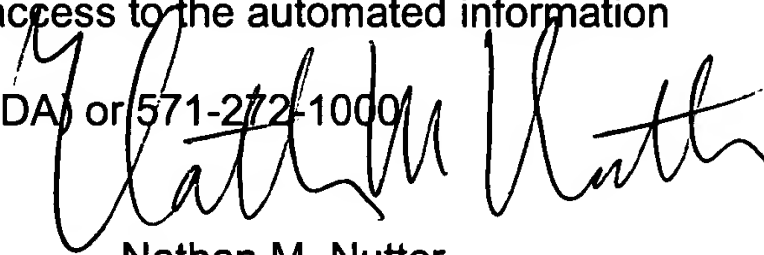
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nathan M. Nutter whose telephone number is 571-272-1076. The examiner can normally be reached on 9:30 a.m.-6:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James J. Seidleck can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1711

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Nathan M. Nutter
Primary Examiner
Art Unit 1711

nmn

6 July 2006